

NORTH QUEENSLAND
NATURALIST

2

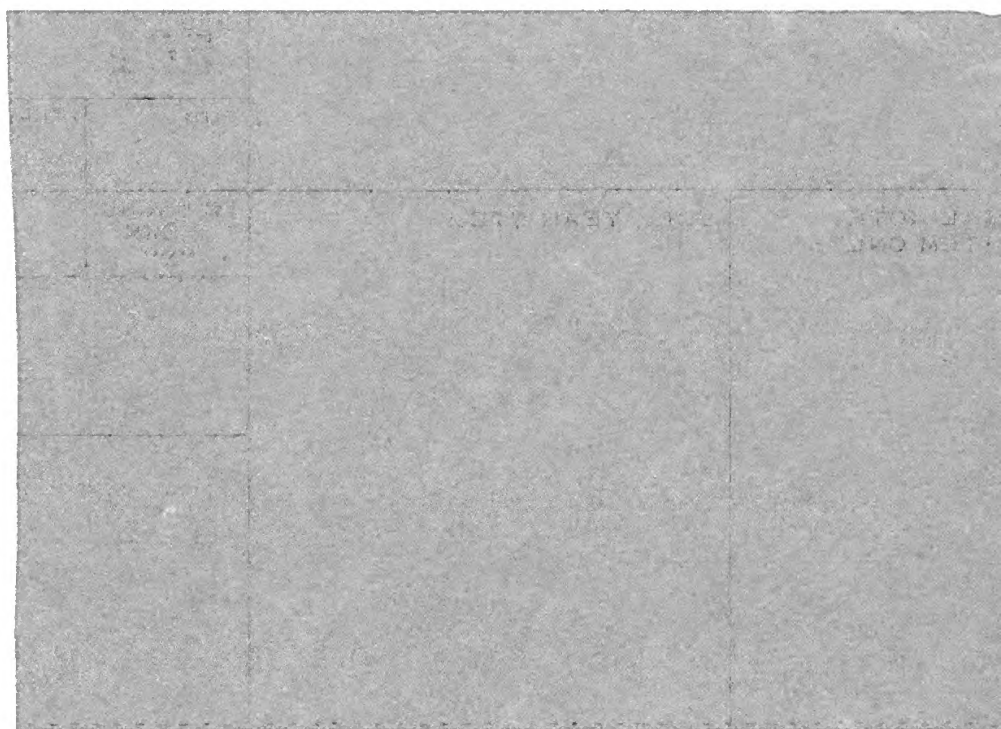
[Nos. 13-24]

OCT. 1933-SEPT. 1934

L.H. Moon
& Son
Bookbinders







The North Queensland Naturalist

The Official Journal and Magazine of the North Queensland Naturalists' Club

Vol. 2, No. 1

OCTOBER, 1933

The Annual Meeting of the North Queensland Naturalists' Association was held on Monday, 11th September, in the Girls and Infants' State School, when election of officers for ensuing year took place.

Dr. Flecker was unanimously re-elected President, a position all felt only he could fill adequately at this juncture.

Also re-elected were:—Vice Presidents: Miss Hooper and Capt. Fish; Librarian Secretary and Editor: Mr. Kennedy; Treasurer: Mr. Gorton; Secretary: Mr. Wyer. New members elected to the Committee were Messrs Askew and Walsh. Mr. Walsh was appointed Assistant Secretary and Miss Hooper, Assistant Editor.

Mr. Evins was unanimously elected to membership of the Club, and new members proposed were Messrs McVilly, Orchard, Morris, Murphy and W. James.

The Treasurer's financial statement showed a balance of £25/14/9.

The President's report dealt principally with the activities of the Club during the past twelve months.

The membership is satisfactory from the point of numbers and members have been regular in attendance at the monthly meetings at each of which an interesting lecture has been given covering varied topics such as Great Barrier Reef, forests, plants, etc.

In contrast, our field meetings have been poorly attended and it is hoped the coming year will see an improvement in this respect.

Our most successful effort was the Wild Nature Show held in the Oddfellows' Hall during August. The general public showed keen interest in this venture and attended well. One object of our Club is to educate the public and local organisations to appreciate the beauty of our local flora and fauna, and as 98 per cent. of our exhibits were purely native to North Queensland we feel that the Wild Nature show accomplished much in this direction.

The Club's chief objective is the formation of a museum in Cairns. So far our efforts have been rewarded by a fine collection of specimens, and we shall very shortly be in possession of three show cases. This year we intend to push on with our scheme and hope that a building to house our collection will soon be found.

Up to date our journal has been typed. With better funds on hand we are now venturing on printed copies. We trust the year will see an improvement in every branch of our activities. We want the journal to be as informative as possible and ask members who can assist in any way to come forward with copy.

In addition to our work for the Museum and Club, we intend in the future to—

- (1) Assist the Main Roads Board, Shire Council and Government to beautify the road between Woree and Cairns by planting suitable and attractive trees.

- (2) Protect the native flora and fauna with special reference to life on the sand cays of Cairns.

- (3) To urge the stamping out of dynamiting of fish and other marine life.

- (4) To co-operate with the City Council in beautifying the city area and in the matter of Botanical Gardens.

Our next meeting should be very interesting as Mr. Knusel has promised to lecture on Lizards, a subject on which Mr. Knusel has given years of study. A good attendance of members is requested.

Members are reminded that the subscriptions are now due.

Addenda and Corrigenda

Vol. 1

No. 9, p. 6—Insert before *Polyalthia*,

Unonia (Linn.)

wardiana, (Bail.), *Niadora*

Mapoon (J. F. Bailey)

Palmeria scandens, insert locality, Wild River (J. F. Bailey).

p. 8—*Cassytha glabella*, insert locality, Mapoon.

Insert before *Adeliopsis*, (L.) *esiangkara* (Bail.) *Esiangkara*.

Mapoon (J. F. Bailey)

No. 10, p. 7—For *Bredemeyera*, (*Comesperma*), (should be transferred to p. 6) *secundum*, read *B. (C) secunda*.

p. 6—For *B. (C.) praeclsum* read *praeclsa*.

p. 7—*Boronia bowmani*, insert locality, Percy River.

Insert before *Melicope*,

Bosistoa, (F. v. M.)

sapindiformis, (F. v. M.), Towra

Mount Dryander

p. 8—*Geijera salicifolia*, insert locality, Brigalow Scrub on Burdekin (F. v. M.)

No. 11, p. 4—After *Erythroxylon* insert *australe*, (F. v. M.), Brigalow Scrub on the Burdekin River (F. v. M.)

p. 5—*Hibiscus divaricatus*, insert locality, Newcastle Range.

p. 8—*Phyllanthus elachophyllus*, insert locality, Newcastle Range.

No. 12, p. 5—*Antidesma dallachyanum*, insert locality, Dunk Island.

p. 6—*Aleurites moluccana*, for *Candle* read *Candle Nut*.

Delete *Nut* on next line.

Croton verreauxii, for (Bailey) read (Baill.)

After *C. arnemicus*, var. *urenaefolius*, insert (Baill.)

On next line for (M'Gillivray) read (M'Gillivray).

Baloghia lucida, for *Scrub Blood* read *Scrub Bloodwood*.

On next line delete *Wood*.

For *Mallotus philippensis* read *M. philippinensis*.

p. 7—*Macaranga involucrata*, for (Bailey) read (Baill.)

Tragia novae-hollandiae, for (Twining) read *Twining Nettle*.

For Family *Balanophoreae*,

Balanophora (Forst), read

Family *Balanopseae*,

Balanops, (Baill.)

Celtis philippinensis, insert locality, Sunday Is. (A. Cunn).

Malaisia tortuosa, for *Deng-ul* read *Deng-ul-ka*.

On next line delete *ka*.

Insert locality, Mapoon (Roth).

p. 8—*Ficus infectoria*, insert locality, Mapoon.

F. platypoda, var. *petiolaris*, insert locality, Cape River.

After *F. platypoda*, var. *subacuminata*, insert (Benth.).

Census of North Queensland Plants (Continued)

Ficus opposita, (Miq.), Murn-tyul.

Palmer R.; Fitzroy Is.; Rockingham

B. (Dallachy); Pt. Denison (Fitzalan);

Estuary of Burdekin, (F.v.M.)

scobina (Benth.)

Lizard Is. (Cunn.)

hispida, (Linn.). Wo-o

Johnstone R., (Harding); Tully R.

(Roth.); Rockingham B. (Dallachy);

Edgecombe B. (Dallachy).

mourilyanensis (Bail.)

Mourilyan Harbour, near Esmeralda

Plantation (Mugford),

esmeralda (Bail.). Pandara.

C. Grafton; Mourilyan Harbour, near

Esmeralda Plantation, (Mugford).

casearia, (F.v.M.)

Endeavour R.; Fitzroy Is.; Rockingham B., (Dallachy).

pleurocarpa, (F.v.M.). Kar-pe.

Barron R.; Johnstone R.; Atherton

crassipes, (Bail.)

Scrubs, Harvey's C.; Scrubs, Russell R

glomerata, (Willd.). Cluster Fig.

Cooktown; Rockingham Bay (Dallachy); Pt. Denison, (Fitzalan).

trichostyla, (Warb.)

Cairns, (Warb.)

setistyla, (Warb.)

Lower Russell River, (Diels)

dielsii, (Warb.)

Central Barron (Diels)

subinflata (Warb.)

Upper Barron (Diels)

Cudrania

javanensis, (Trecul.) Cockspur Thorn

Stewart's Creek, (Bowman); Rockingham Bay (Dallachy).

Laportea, (Gaudich.)

moroides, (Wedd.) Stinging Tree

Edge Hill; Mungana; Rockingham

B., (Dallachy); Mt. Elliott, (Dallachy)

Pt. Denison, (Fitzalan).

Boehmeria, (Jacq.)

nivea, (Hook) Jalcan-Jalcan

Johnstone R., (Harding)

Pouzolzia, (Gaudich)

indica, (Gaudich)

Rockingham B. (Dallachy)

quinquenervis, (Benn.)

Upper Lind R., (Leichhardt); Lagoons

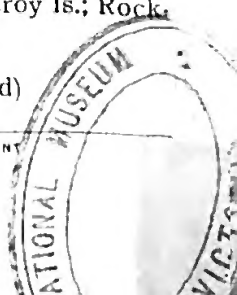
Rockingham B., (Dallachy).

Pipturus, (Wedd.)

argenteus, (Willd.) Thil-la-wo.

C. York, (Daemel); Fitzroy Is.; Rockingham B., (Dallachy).

(To be continued)



The North Queensland Naturalist

The Official Journal and Magazine of the North Queensland Naturalists' Club

Vol. 2, No. 2

CAIRNS, NOVEMBER, 1933

The usual monthly meeting of the N.Q. Naturalists Club was held in the Girls' School Room, Cairns, on Friday, October 9th, the President being in the chair.

A most interesting paper on Molluscs was given by Dr. Flecker (President), who illustrated his lecture with upwards of 40 different local specimens representative of the four Orders of Molluscs.

Other exhibits were: Moth (*Xylentes boisduvale*), Spider (*Atrax*) by Mr. Allen (Gordonvale) and orchid in flower (*Calanthe veratrifolium*) by Dr. Flecker.

Notes on specimen of "Wood Moth" obtained by Mr. E. Allen, Gordonvale:—

Family COSSIDAE. *Xylentes boisduvale*. According to Mr. F. P. Dodd, of Kuranda, these moths are amongst the heaviest known. The caterpillars of these exist in trunks and branches of trees, but mostly in forest kinds of hardwood, such as wattles and eucalypts. The moths pass a foodless existence, living but a few days, although the grubs live for nearly three years before pupating. It is recorded in Tasmania that since the extinction of the native race of aborigines from that colony, immense damage is done to wattle forests owing to the fact of there being no check to the moths' depredations, as hitherto the grubs were cut out of trees for food, apparently supplying an article of diet for the larder.

Under the auspices of the Club, a public lecture by Mr. V. Kennedy on the Great Barrier Reef profusely illustrated by numerous beautiful slides, was held at the City Council Chambers on Thursday 19th October.

The Club's outing to Gadgarra State Nursery under the guidance of Mr. Tardent, silviculturist and Forest Factor, of Atherton, was one of the most interesting and instructive yet held.

At the Nurseries are about 150,000 young trees in various stages of growth. These include Hoop Pine (*Araucaria cunninghamii*), Bunya Pine (*A. bidwilli*), Kauri (*Agathis palmerstoni*), Maple Silkwood (*Flindersia brayleyana*), Satinwood (*Eugenia gustavoides*), Northern Grey Teak (*Gmelina fasciculiflora*), Beef Oak (*Grevillia striata*), White "Oak" (*Stenocarpus sinuatus*), Flame Currajong (*Brachychiton acerifolium*), etc.

The first plantation visited was of *Grevillia robusta* and the next of Maple Silkwoods. On the side of the road between the two plantations were many beautiful trees—Mexican Cedars, pines of various kinds, as well as some of the old giants of the scrub left standing.

Our guide explained the system of shelter planting, a cross between clearing the ground wholly and using the uncleared scrub land.

The Club greatly appreciate the sacrifice of time and the trouble taken by Mr. Tardent and assure him of our sincerest thanks.

The thanks of the Club are also offered to those who loaned cars for the occasion.

Addenda and Corrigenda

Vol. 1—

No. 9, p. 6—After (*Myristica*) *insipida*, (R.Br.) Queensland Nutmeg, add Flowers Jan.

After (*Polyalthea*) *nitidissima*, (Benth) Wo-a, add Flowers Jan.

After (*Mollinedia*) *subternata* (Bailey), Wonda, add Flowers Feb. to May.

After (*Daphnandra*) *aromatica* (Bail.) Cheedingnan, add Flowers Dec to May

p. 7—Before (*Cryptocarya*) *obovata*, add (C.) *patentinervis*, F.v.M., Atherton Tableland (White and Francis).

(C.) *obovata*. For Long Tom read White Walnut.

Add loc. Cairns-Atherton Dis. (Swain)

After (C.) *oblata* (Bail.) add Bolly Silkwood.

Delete localities and substitute Between Cooktown and Cardwell (Swain), Atherton Plateau (Swain).

For (C.) *palmerstoni* (Bail.) Black Walnut, read *Endiandra palmerstoni* (Bail.), Walnut Bean. Flowers Jan to Dec, and insert in Genus *Endiandra*.

For (C.) *bancroftii* (Bail.) Red Walnut, read (*Beilschmiedia*) *bancroftii* (Bail.), Canary Ash. Flowers Dec. to Apr.

Add locality Atherton-Evelyn Tableland (Swain), Malanda District (Swain), Gadgarra District (Swain).

Insert Genus *Beilschmiedia* (Nees.) before (B.) *bancroftii* and delete before (B.) *obtusifolia*.

After (B.) *obtusifolia* (Benth.) add

Blush Walnut. Flowers Jan. to Sep.

After (*Endiandra*) *discolor* (Benth.) add

Flowers Sep. to Dec.

p. 8—After (*Litsea*) *dealbata* (Nees), Marragiddie, add Flowers Aug. to June. (L.) *reticulata*. Add loc. Cairns (Swain) *Cassytha filiformis*. Add loc. Palm Is. (Herbert).

No. 10, p. 5—*Capparis lucida*. Add loc. Palm Is. (Herbert).

Cochlospermum gillivraei. Add loc. Palm Is. (Herbert).

p. 6—*Calophyllum inophyllum*. Add loc. Palm Is. (Swain).

After (C.) *costatum* (Bailey), Evelyn Teak, add Flowers Aug.

For *Polygaleae* (Juss.) read *Polygalaceae* *Bredemeyera secunda*. Add loc. C. Flinders.

For (*Melia*) *composita* (Willd.) White Cedar, read (M.) *azedarach* (Linn) var. *australasica*, Tulip Cedar.

Dysoxylon pettigrewianum. For Cairns Satin-wood read *Spur Mahogany*.

Add loc. Atherton Tablelands (Swain).

(D.) *cerebriforme*. Add loc. Atherton Jungles (Swain).

p. 7—*Carapa moluccensis*. For Cannonball tree, read Cedar Mangrove.

Cedrela toona, var. *australis*. Add loc.

C. York (Froggatt), Cooktown (Swain), Pt. Douglas (Swain), Cairns (Froggatt).

Census of North Queensland Plants (Continued)

Family CASUARINACEAE.

Casuarina (Linn.)

equisetifolia (Forst.), Beach Sheoke.

Is. of G. of Carpentaria (Henne); Endeavour Is.; Endeavour Strait (Leichhardt); Is. off C. Flattery (F.v.M.); C. Bedford (F.v.M.); Green Is.; Rockingham B. (Dallachy); Palm Is. (Herbert); Pt. Denison (Fitzalan); Edgecombe B. (Dallachy).

suberosa (Ott. and Dietr.), Black Sheoke. Flowers Mar. to Aug.

C. York (Hill); Rockingham B. (Dallachy).

cunninghamiana (Miq.), River Sheoke. Flowers Jan. to Aug.

Gilbert R. (Daintree); Daintree (Swain).

torulosa (Ait.), Rose Sheoke. Flowers Dec. to Apr.

Atherton Tableland (Swain); Rockingham B. (Dallachy); Mt. Elliott (Fitzalan).

Family CELASTRACEAE.

Euonymus (Tourne)

australiana (F.v.M.)

Rockingham B. (Dallachy).

Celastrus (Linn.)

dispermus (F.v.M.), Orange Box. Flowers Feb.

Rockingham B.; Pt. Denison (Fitzalan).

cunninghamii (F.v.M.)

Is. of G. of Carpentaria (R.Br.)

Gymnosporia (W. and Arn.)

montana (W. and Arn.)

Cape York (M'Gillivray)

Hypsophila (F.v.M.)

halleyana (F.v.M.)

Mt. Bellenden Ker, above 4,000 feet

oppositifolia (F.v.M.)

Mt. Bartle Frere (Johnson)

Hedraianthera (F.v.M.)

porphyropetala (F.v.M.)

Rockingham B. (Dallachy)

Denhamia (Meissn.)

obscura (Meissn.) Tchannan

Pennefather R.; Newcastle Range between Gilbert and Burdekin R.

viridissima (Bail. and F.v.M.)

Bellenden Ker

Caryospermum (Blume)

arborescens (F.v.M.)

Rockingham B. (Dallachy)

melanocarpum (F.v.M.)

Lizard Is.; Fitzroy Is.; Rockingham B.; Pt. Denison.

Siphonodon (Griff.)

pendulum (Bail.) Bambudal

Musgrave E.T. Station (Jacobson);

Palmer R. (Roth); Princess Charlotte Bay; C. Bedford; Cooktown

Elaeodendron (Jacq. F.)

membranaceum (Bail.)

Evelyn (J. F. Bailey)

To be continued



The North Queensland Naturalist

The Official Journal and Magazine of the North Queensland Naturalists' Club

Vol. 2, No. 3

CAIRNS, DECEMBER, 1933

The usual monthly meeting was held in the Girls' and Infants' State School on November 13th, when a very interesting paper on "Organic Matter in Soil" was given by Mr. Jack Foster.

Discussion took place with reference to the continued dynamiting of fish on the Reef.

During discussion with regard to the intended excursion next Easter, it was decided to hold the camp at Michaelmas Cay, and that each member attending specialise on a single subject such as coral, sponge, seaweed, etc.

Exhibits were: Finger Cherries, *Rhodomyrtus*, by Mr. Askew; Maple leaf, *Acer* (Canada), also Maple Silkwood, *Flindersia brayleyana*, by Dr. Flecker.

At this meeting, Mr. A. B. Cummings exhibited a number of ant-lion larvae, *Myrmeleon*, in a sand-filled dish. He demonstrated the method of capturing their prey by the formation of sand pits, whereby any unwary creature is engulfed by a landslide and falls a victim to the ant-lion.

Reference was made to the death of one of our members, Mr. McTaggart, and, since that meeting, the Club has sustained a further loss by the death of our much esteemed member Mrs. McManus. Mrs. McManus was present at this meeting, showing her usual keen interest in all exhibits and discussions. The Club will greatly miss her genial presence and deeply sympathises with her sorrowing relatives.

The following plants sent in by Miss Walsh from Butcher's Creek have been determined: *Phaius grandifolius*, *Angiopteris avecta*, *Toeckima erythrocarpa*, *Daphnandra aromatica*, *Fontainea picrosperma*, *Guioa lasioneura*, and *Eugenia gustavioides*.

The next meeting of the Club will be held at the Girls' and Infants' School at 8 p.m. on Monday, December 11th, when a lecture by Mr. J. H. Buzacott, entomologist of Meringa, will be given. Mr. M. J. Manski will also exhibit a series of photographs taken by Mr. H. Chargois demonstrating the life history of the giant Hercules Moth, *Coscenoscera hercules*, from the egg to the fully developed moth.

Arrangements will be announced for two Saturday afternoon excursions: (1) To mangrove swamp at Glen Boughton in search of Ant House Plant, *Myrmecodia*. The party will be led by Mr. A. J. Moran. (2) To Barron Beach. Party will be lead by Mr. Ike Askew.

The lecturer for January will be Mr. M. Mackesy, who will talk on Australian Snakes. This will be illustrated by numerous specimens.

The editor specially invites literary contributions recording natural history observations for publication in these columns.

Addenda and Corrigenda

Vol. 1

No. 9, p. 5—*Tetracera wuthiana*. Add locs.
Dunk Is (Banfield); Johnstone R.
(Michael).

After (*Hibbertia*) *banksii* (Benth.) add
Rusty Guinea Flower.

Before (*H.*) *velutina*, insert (*H.*) *con-*
cinna (Bail.)

Herberton (Ringrose).

After (*H.*) *velutina* (R.Br.) add Velvet
Guinea Flower.

After (*H.*) *lepidota* (R.Br.) add Slender
Guinea Flower.

p. 6—Before Family Myristiceae, insert
(*P.*) *johnsonii* (DC.)

Mt. Barle Frere, 5000 ft. (Johnson).

Before *Mitrephora* insert (*P.*) *michaelii*
(White)

Johnstone R. (Michael)

After (*Melodorum*) *maccraei* insert
(F.v.M.)

p. 7—After (*Cryptocarya glaucescens*),
var. *nitida*, insert (Benth.)

Before (*C.*) *triplinervis* insert (*C.*) *cor-*
rugata (White and Francis). Oak
Walnut.

Bellenden Ker Range, near summit
of central peak (White).

Before (*C.*) *oblata* insert (*C.*) *australis*,
(Benth.) Gellmerra.

Cairns Dist.; Johnstone R. (Bancroft)

(*C.*) *pleurosperma* (White and Francis)
Gadgarra (Fuller); Bellenden Ker

(White); Johnstone R. (Michael).

Before *Beilschmiedia* insert (*C.*) *corru-*
gata. Oak Walnut.

Bellenden Ker Range (White).

(*B.*) *bancroftii*. Delete loc. Atherton-
Evelyn Tableland (Swain) and add

Barron R. (Cowley); Atherton Dis.
(Mocatta); Evelyn (J. F. Bail.);

Bellenden Ker Scrubs (F. M. Bail.);

Russell R. (Sayer).

After loc. Johnstone R. add (Bancroft).

Delete (*B.*) *lachnostemonia*.

Before (*Endiandra*) *hypotephra* insert
(*E.*) *longipedicillata* (White and

Francis)

Atherton District (Mosatta).

acuminata (White and Francis)

Yarrabah (Michael).

palmerstoni (as per last list of correc-

tions).

p. 8—After (*Cassytha*) *filiformis* (L.) add
Thready Dodder-laurel.

(*Tinospora*) *berneyi*. Delete loc. and
insert Croydon (Wilson); Spring

Valley, Hughenden.

Before *Adeliopsis* insert

Stephania (Lour.)

bancroftii (Bail.)

Stannary Hills (Bancroft).

Before *Capparis* insert *Polanisia* (Rafin)
viscosa (DC.)

Moa Is. (Macgregor)

Census of North Queensland Plants (Continued)

Family SAPINDACEAE (Juss.)

Castanopora (F.v.M.)

alphandi (F.v.M.)

Barron Scrubs; Mulgrave Scrubs;

Boonjie (Kajewski); Johnstone

Scrubs; Rockingham B.

? *longistipitata* (Bail.)

Scrubs of Barron R. (E. Cowley).

Cupania (Linn.)

wadsworthii (F.v.M.)

Mt. Elliott

anacardioides (A. Rich.) Tukeroo.

Flowers Sep. to Oct.

Burdekin R. (F.v.M.)

serrata (F.v.M.)

Rockingham B. (Dallachy)

flagelliformis (Bail.) Maraguigi.

Barron R. (E. Cowley)

curvidentata (Bail.)

Stony Creek (Nugent).

psendorhus (A. Rich.). Pink Tamarind.

Flowers Feb. to April.

Barron R. Ranges; Cardwell.

robertsonii (F.v.M.)

Rockingham B. (Dallachy)

sericolignis (Bail.)

Scrub about Barron R.; Mulgrave R.

Toechima

erythrocarpa (F.v.M.)

Butcher's Cr. (Miss Walsh); Ranges
about Rockingham B. (Dallachy).

lanceolatum (White). Flowers May and
June.

Gadgarra (Kajewski).

Ratonia (DC.)

lachnocarpa (F.v.M.)

Rockingham B. Coast (Dallachy).

grandissima (F.v.M.)

Rockingham B. (Dallachy)

anodonta (Benth.)

Rockingham B. (Dallachy)

periculata (F.v.M.)

Gregory R., near Mt. Dryander (Mic-
hael).

cordierii (F.v.M.)

Rockingham B. (Dallachy)

tenax (Benth.)

Rockingham B. (Dallachy)

nugentii (Bail.), Chambin

Barron R. (Bail.); Freshwater Creek
(Cowley and Nugent).

exangulata (F.v.M.)

Rockingham B. (Dallachy)

lessertiaua (Benth.) Murgon

Daintree R. (Cowley); Cardwell.

daemeliana (F.v.M.)

C. York (Daemel).

martyana (F.v.M.)

Rockingham B. (Dallachy)

Atalaya (Blume)

multiflora (Benth.)

C. York (M'Gillivray)

hemiglauca (F.v.M.). Whitewood.

Gilbert R.

To be continued



The North Queensland Naturalist

The Official Journal and Magazine of the North Queensland Naturalists' Club

Vol. 2, No. 4

CAIRNS, JANUARY, 1934

The next meeting of the N.Q. Naturalists' Club will be held at the Girls' and Infants' School, Abbott Street, Cairns, on Monday, 15th January, at 8 p.m. Mr. M. Mackesy will lecture on "The Snakes of Australia," illustrating his talk by numerous specimens.

The usual monthly meeting of the Club was held on Monday, 11th December, 1933.

Miss M. Walsh, of Butcher's Creek, Peeramoon, and Messrs M. D. Kirsner, Manager of the Cairns Branch of L. A. Wilkinson, Ltd., and F. Hunter, District Postal Inspector, were elected members.

Miss Mary Smyth, teacher of Girls' School, Cairns, Dr. R. S. Allan, geologist, Christchurch, N.Z., and Mr. L. Bowen were proposed for membership.

Mr. M. J. Manski showed a large series of very beautiful photographs taken by Mr. H. Chargois showing the giant Hercules Moth, *Cosmoscra hercules*, in every stage of development from the eggs on the feeding plant, caterpillars at different stages of growth, the formation of the chrysalis, the different stages of emergence of the moth, and finally the fully developed moth of each sex.

Mr. J. W. Buzacott, entomologist of Meringa, gave a very instructive talk on Mendelism, outlining Mendel's work, and giving a short account of the internal structure of the dividing cell, pointing out the manner in which the genes are arranged in order in the chromosomes. The manner in which the different hereditary characteristics are transmitted was explained.

Specimens of *Lingula* (?) *murphiana* secured alive at Mission Bay were shown by Dr. Flecker. These brachiopods are of much interest to palaeontologists, as they are living representatives of similar forms found in some early geological strata.

Specimens of pressed flowers forwarded by Miss M. Walsh, of Butcher's Creek have been identified as *Melastoma malabathricum* (Melastomaceae) and *Randia hirta* (Rubiaceae).

An excursion to Barron Heads was held on Sunday, 17th December, under ideal weather conditions. Opportunity was afforded of exploring the beaches both of Trinity Bay and on the river, as well as the intervening scrub. A great variety of plants were noted including a native passion flower (*Passiflora*) with beautiful pink flowers. On the beach were found some shells, including *Solarium*, and also a number of very flat cake urchins (*Echinoderms*).

The excursion arranged to take place to Glen Boughton has had to be postponed owing to inclement weather. An announcement when this will take place will be made at the next meeting.

The Cairns City Council has agreed to the suggestion offered by this Club to prohibit the use of harpoons, spears, etc. on Green Island. Much useless and aimless destruction of marine life, especially of the clams (*Fridacna*) has been caused by their use.

Addenda and Corrigenda

Vol. 1

No. 9, p. 5—*Clematis glycinoides*. For (Flowers in August) read Flowers July and August.

Add loc. L. Barrine (Kajewski).

Atter *Tetracera daemeliana* (F.v.M.) add Flowers Dec.

Add locs. Daintree R. (Kajewski).

(T.) *nordtiana*. Add loc. Daintree R. (Kajewski).

Before Family *Nymphaeaceae* add

(H.) *scandens* (F.v.M.)

var. *oxyphylla* (Domin). Flowers Nov.

Scrubby Cr. (Kajewski)

Saurauja (Willd.)

andreana (Oliver). Flowers Oct.

Freshwater Cr.; Boonjie (Kajewski);

Creeks about Bellenden Ker.

**Piper banksii*. Add loc. Daintree R. (Kajewski).

Bottom of page add

(P.) *triandrum* (F.v.M.)

Gadgarra (Kajewski)

p. 6—For (Family) *Myristiceae* read MYRISTACEAE.

Before Family *Magnoliaceae* add (M.)

cimicifera (R.Br.), var. *mueleri* (Donn.) (Flowers Nov.)

Daintree R. (Kajewski); Gadgarra (Kajewski).

Drimys membranacea. Add locs. Gadgarra

(Kajewski); Rockingham B. (Dallachy).

After Hills about Mulgrave R. add (Bail.)

After (D.) *semecarpoides* (F.v.M.) add Flowers Dec.

Add locs. Mt. Alexander (Kajewski); E. Malanda (Kajewski).

Before *Galbulimima* add (D.) *insipida* (R.Br.). Flowers Oct.

Mt. Bartle Frere (Kajewski)

Before Family *Anonaceae* add

Austrobaileya (White)

scandens (White). Flowers Oct.

Boonjie (Kajewski)

Before (*Melodorum*) *uhrii* add

(M.) *leichhardtii* (Benth.) Merangara Daintree R. (Kajewski); Malanda (White).

(M.) *maccraei*. Add loc. Daintree R. (Kajewski).

Before *Saccopetalum* insert Family EUPOMATIACEAE.

Before Family *Monimiaceae* add

Eupomatia (R.Br.)

laurina (R.Br.). Flowers Nov.

Scrubby Cr., Herberton Range (Kajewski).

Before *Daphnandra* add

Hedycarya (Forst.)

loxocarpa (Benth.)

Gadgarra (Kajewski).

Census of North Queensland Plants (Continued)

Sapiindus (L.)

? *australis* (Benth.)

C. York (M'Gillivray)

Nepheclum (L.)

semilucum (F.v.M.)

From Rockingham B. southward (F.v.M.)

consutum (F.v.M.)

Rockingham B.; Pt. Denison.

subdentatum (F.v.M.)

Fringilburra Cr.; Rockingham B. (Dallachy).

semicinereum (F.v.M.)

Rockingham B.

tomentosum (Benth.). Flowers Oct. to Apr.

Rockingham B. (Dallachy).

divaricatum (F.v.M.)

Rockingham B.

distyle (F.v.M.). Conderoy.

Pt. Denison Southward.

callarie (Bail.). Callarie.

Up. Barron R. (J. F. Bail.); Mulgrave R.

Heterodendron (Desf.)

oleaeifolium (Desf.)

Bowen R.; Burdekin R. (F.v.M.)

Harpullia (Roxb.)

frutescens (Bail.)

Atherton Tableland (Bick.); Herberton (Rauft); Evelyn (J. F. Bail.); Bel-

lenden Ker, over 2,000ft.; Mourilyan (Mugford); Johnstone R. (Michael). *rhyticarpa* (White and Francis). Flowers July.

Freshwater Cr. (Francis); Yarrabah (Michael); Gadgarra (Kajewski); Barnard's Spur, Bellenden Ker Range (Bail.).

pendula (Pianch.). Tulip Lancewood. Flowers July to Oct.

Cairns-Atherton Dist. (Swain); Rockingham B.; Pt. Denison (Fitzalan).

Blepharocarya (F.v.M.)

involucrigera (F.v.M.). Rose Butterwood. Flowers Feb. to Apr.

Coen R.; Endeavour R.; Atherton Dist. (Swain); Herberton Dist. (J. F. Bail.); Innisfail Dist. (Swain).

Dodonaea (L.). Hop Bush.

triquetra (Andr.). Large-leaf Hop-bush. Flowers Oct. to Jan.

Rockingham B. southward.

lanceolata (F.v.M.)

Is. of G. of Carpentaria (R.Br.); Sunday Is. (M'Gillivray); Range Road (Kajewski); Palm Is. (Henne); C. Cleveland (Cunn.); Pt. Denison (Fitzalan).

To be continued

Cairns Daily Times Print



The North Queensland Naturalist

The Official Journal and Magazine of the North Queensland Naturalists' Club

Vol. 2. No. 5.

CAIRNS, FEBRUARY 1934

The usual monthly meeting of the Club was held on Monday, January 15th, when Mr. Morris Mackesy gave a lecture on Australian Snakes, illustrated by Specimens. The giant sea snake, captured the previous day by Messrs Peel, Black, Walk and Cole, measuring 76 inches in length, was on view. It may be a new species. Further particulars will appear later.

Miss M. Smyth, Dr. R. S. Allan of Christchurch, N.Z., and Mr. L. Bowen were elected members.

Messrs Buzacott, Henry Purcell, Miss Smallwood and Mrs. H. K. N. McDonnell were proposed for membership.

The next meeting of the Club will be held at the Girls and Infants' School at 8 p.m. on Monday, February 12th, when Mr. Harold Smith, of the Entomological Laboratory, Atherton, will deliver an address.

How to Collect Insects

By FRED H. JAMES, Atherton

The collection and study of insects is fascinating and profitable work for old and young. Insects are best captured by using a butterfly net. They may be killed without injury by dropping them in a glass jar filled with the fumes of benzine, alcohol, ether, chloroform, carbon disulphide, or potassium cyanide. Once they are dead the insects should be spread out in their natural attitude on a soft board and held in place by fine pins until they are quite dry; they may then be mounted on long pins thrust through the thorax and into the bottom of a shallow box. When mounted, labels bearing the name of the specimen should be neatly pasted underneath. A small magnifying glass is a great aid to insect study.

About 300,000 species of insects have been collected, named and described by scientists. But by far the greater part of the insects which inhabit the world are still unknown to science. Hundreds of new species are discovered every year.

WHERE INSECTS FLOURISH

As a class, insects are found in virtually all parts of the earth, many species existing inside the arctic circle. But insects flourish best in warm countries. From man's point of view insects may be divided into the harmful and useful classes. Many kinds, like grasshoppers and locusts, plant lice, scale insects, cotton weevils, and caterpillars of nearly all moths and butterflies, do an immense amount of damage to trees, crops, domestic animals and food stores. Others, such as cockroaches, flies, fleas, mosquitoes and gnats, annoy men and animals and even spread some of the most dreaded diseases of mankind such as malaria, yellow fever, and that frightful scourge bubonic plague. But there is another side to the story which is often overlooked. If it were not for bees and other honey-seeking insects which carry the fertilising pollen from flower to flower, it would be almost impossible to raise many kinds of fruit and other crops.

(To be continued)

Census of North Queensland Plants (Continued)

- Dodonaea* (continued)
viscosa (L.) Giant Hop-bush. Flowers April to July.
 Mabuiag Is. (Macgregor); Endeavour R. (Banks); C. Upstart (Macgillivray); Rockingham B. (Cunn).
 var. *vulgaris* (Benth.)
 Endeavour R.
stenophylla (F.v.M.). Narrow-leaf Hop-bush.
 Burdekin R. (F.v.M.)
physocarpa (F.v.M.)
 Norman R. (Gulliver); Gilbert R. (Daintree).
macrozyga (F.v.M.)
 Source of Cape R. (Bowman)
vestita (Hook)
 Endeavour R. (Banks)
oxyptera (F.v.M.)
 Is. of G. of Carpentaria (R.Br.)
Distichostemon (F.v.M.)
phyllopterus (F.v.M.)
 Is. of G. of Carpentaria (R.Br.); Somerset; Rockingham B. (Dallachy); Cape R. (Bowman).
Guioa
acutifolia (Radlkofer)
 L. Barrine (Kajewski)
lasioneura (Radlkofer). Flowers Sep.
 Butcher's Creek (Miss Walsh); Boonjie (Kajewski).
montana (White). Flowers Oct.
 Mt. Bartle Frere (Kajewski).
- Cupaniopsis*
serrata (Radlk.)
 var. *tomentella* (Radlk.) Flowers Oct.
 Boonjie (Kajewski)
Sarcopteryx
stipitata (F.v.M.)
 Range Rd. (Kajewski).
Jagera
pseudorhus (Radlk.)
 L. Barrine (Kajewski)
Synima
cordieri (Radlk.). Flowers Dec.
 Daintree R. (Kajewski)
Arytera
divaricata (F.v.M.). Flowers July.
 L. Barrine (Kajewski)
lauterariana (Bail.)
 Gadgarra (Kajewski)
Mischocarpus (F.v.M.)
lachnocarpus (F.v.M.)
 Gadgarra (Kajewski)
pyriformis (F.v.M.)
 L. Barrine (Kajewski)
 FAMILY ANACARDIACEAE (R.Br.)
Rhus (L.)
rufa (Teyssman and Binnesidyk)
 Valley of Lagoons (Dallachy); about Rockingham B. (Dallachy).
Buchanania (Roxb.)
muelleri (Engl.) Bandai
 Is. of G. of Carpentaria; Is. of Torres Str.; C. York; Endeavour R.

Addenda and Corrigenda

- Vol 1
 No. 9, p. 5—*Piper novae-hollandiae*. For Australian Pepper-vine read Climbing Pepper.
 p. 6—Before (*Daphnandra*) *aromatica* add (D.) *repandula* (F.v.M.)
 Gadgarra (Kajewski)
 Bottom of page add
Leviera
acuminata (F.v.M.)
 Daintree R. (Kajewski)
Tetrasynandra
laxiflora (Benth.). Male flowers May.
 Gadgarra (Kajewski)
pubescens (Benth.)
 Gadgarra (Kajewski)
Wilkiea
macrocarpa (Bail.). Flowers Nov.
 Herberton Range (Kajewski)
macrophylla (Cunn.)
 Gadgarra (Kajewski)
 p. 7—After (*Cryptocarya*) *mackinnoniana* (F.v.M.) Koonjoongaroo, add Flowers May.
 Add loc. Gadgarra (Kajewski)
 After (C.) *glaucescens* (R.Br.) insert White Laurel.
 (C.) *triplinervis*. Add loc. Daintree R. (Kajewski).
 After (C.) *cinnamomifolia* (Benth.) add Flowers Nov.
 Add loc. Herberton Range (Kajewski).
 Before *Baileya* add
 (C.) *angulata* (White)
 Gadgarra (Kajewski); Boonjie (Kajewski).
bowiei (Hook). Flowers Dec.
 Daintree R. (Kajewski)
 (B.) *obtusifolia*. Add loc. Gadgarra (Kajewski)
Endiandra acuminata. Add loc. Daintree R. (Kajewski).
 After (E) *hypoteaphra* (F.v.M.) add Flowers Dec.
 Add locs. Daintree R. (Kajewski); Gadgarra (Kajewski).
 (E.) *discolor*. Add loc. Gadgarra (Kajewski)
 Before (E.) *cowleyana* add
 (F.) *montana* (White) Flowers Dec.
 Mt. Alexander (Kajewski)
pubens (Meisn.)
 Gadgarra (Kajewski)
 (E.) *dichrophylla*. Add loc. Gadgarra (Kajewski).
sankeyana. Add loc. Gadgarra (Kajewski).
tooram. Add loc. Gadgarra (Kajewski).



The North Queensland Naturalist

The Official Journal and Magazine of the North Queensland Naturalists' Club

Vol. 2. No. 6.

CAIRNS, MARCH 1934

Life History of *Cynthia Arsinoe* (Ada)

By M. J. MANSKI

In Nos. 4 and 5 of Vol. I of the North Queensland Naturalists' Journal I endeavored to write up this life history, but had to admit failure. Since then I have discovered that although the eggs are deposited on various species of *Passiflora* it was only by careful search that I discovered that *Modecca populifolia* was the only food plant on which I succeeded in rearing the young larvae and thus obtaining the life history. Although the female persistently deposits her eggs on the tendrils of the granadilla, it is not the food plant and the larvae will not thrive on it.

The eggs are really like a Mills bomb, and the larvae emerge in three days, but as I have already described the eggs and young larvae I will not repeat it, and will continue from when the young larvae emerge from the eggs.

The young larvae keep to the tendrils of the food plant, only leaving it to go in search of the leaf, and after eating their fill return to their places on the tendril. They are not gregarious feeders and may be found all over the food plant singly.

A record kept shows eggs deposited on 10th December emerged on 13th December. On 15th December they changed their first skin, they now being covered with black branched spines, white tipped, body black and brown, and two horny projections on the head.

On 21st December the second change of skin occurred, the spines being all black and the color being black with numerous yellow spots, the horny projections on the head remaining as before.

On 24th December the third shedding took place, and this time the color changed to green or black with yellow spots down the back, having a pattern of the Prince of Wales feather design on each segment on centre of back from head to posterior end, the spikes being black and the side portions of segments pink or yellow with spines to match.

On 29th December, the larvae now being two inches in length started to pupate by hanging head downwards, being fastened by a cremaster. The pupae vary in color, some being dark brown whilst others were light brown and some green. Above the wing cases and on the second last segment are broad wing-like processes pointing outwards and backwards, and have golden or mother-of-pearl spots towards anterior end.

On 7th January the butterfly emerged, showing this life cycle being completed in less than one month, although later records show the life cycle extending over the month.

How to Collect Insects (Cont.). By Fred H. James, Atherton.

If it were not for the beetles, wasps and others which destroy every year vast numbers of the harmful insects, our fields and gardens would be overrun with pests of all kinds. Many insects which burrow in the ground do a great work as cultivators, and countless scavenger insects help the bacteria in getting rid of refuse for us. Besides, certain insects manufacture substances of great value, such as silk, honey, wax, dyes and shellac. Only two kinds can be domesticated with profit—the silkworm and the honey bee.

Census of North Queensland Plants (Continued)

- Buchanania* (continued)
mangoides (F.v.M.)
 Family Is. (Dallachy)
- Semecarpus* (L.)
australiensis (Engl.) Marking-nut.
 Is. of G. of Carpentaria; Is. of Torres Str.; C. York to Trinity B.; Annan R. (Roth).
- Euroschinus* (Hook.)
falcatus (Hook.) Blush Cugerie. Flowers Sept. to Dec.
 Sunday Is. (M'Gillivray); Barron R. (J. F. Bail.); Cairns; Range Rd. (Kajewski); Sources of Burdekin R. (F.v.M.)
- Pleiogynium* (Engl.)
solandri (Engl.) Tulip Plum
 Cairns-Atherton Region (Swain); Palm Is. (Herbert); Townsville District (Swain); Burdekin R. District (Swain).
- FAMILY CORYNOCARPACEAE**
Corynocarpus
australasica (White). Flowers Aug.
 Gadgarra (Kajewski)
- FAMILY PLUMBAGINEAE** (Juss.)
Aegialitis (R.Br.)
annulata (R.Br.)
 Prince of Wales Is. (R.Br.); C. York (Daemel); Lord Howick's Group; Palm Is. (Herbert); Pt. Denison (Fitzalan).
- Limonium*
australe (Kt.). Yellow Sea-lavender
 Pt. Denison (Fitzalan)
- Plumbago* (L.)
zealanica (L.)
 Julia Cr.; Goode Is., Torres Str. (Macgregor); Barnard Is. (M'Gillivray); Pt. Denison (Fitzalan).
- FAMILY PORTULACACEAE** (Juss.)
Portulaca (L.) Purslane Plants.
oleracea (L.) Common Purslane
 Cloncurry (Palmer)
australis (Endl.) Me-mama
 G. of Carpentaria; Wai Weir Is. (Macgregor).
- Calandrinia* (H.B. and K.)
uniflora (F.v.M.)
 Norman R.; Gilbert R.
quadrivalvis (F.v.M.)
 Endeavour R.
spergularina (F.v.M.) Spurrey Purslane
 G. of Carpentaria; Torres Str.; C. York.
oligosperma (F.v.M.)
 Cape R.
- FAMILY CARYOPHYLLEAE** (L.)
Polycarpaeae (Lour.)
synandra (F.v.M.)
 Mapoon (Macgregor)
ecglabra (White and Francis)
 Dugald Silver-Lead Lodes, Cloncurry District (Miller).
spirostyles (F.v.M.) Copper Plant
 Gilbert R.; Northcote; Herberton.
breviflora (F.v.M.)
 Badu Is. (Macgregor)

Addenda and Corrigenda

- Vol 1
 No. 9, p. 7—*Cinnamomum propinquum*.
 Add loc. Bartle Frere (Kajewski).
 p. 8—after (*Litsea*) *zeylanica*, add
 (Nees)
 (L.) *zeylanica*. Add loc. L. Eacham (Kajewski).
 (L.) *dealbata*. Add locs. Daintree R. (Kajewski); Boonjie (Kajewski).
 After (L.) *ferruginea* (Benth. and Hook.)
 add Pigeon-berry Tree.
 (L.) *reticulata*. Add loc. Range Rd. (Kajewski).
- Before *Stephania* add
Hypserpa
laurina (F.v.M.) Flowers Nov.
 L. Barrine (Kajewski)
- No. 10, p. 5—Before (C.) *Lucida* insert
 (C.) *canescens*
 var. *glauca* (Benth.)
 Moa Is. (Macgregor)
 (C.) *lucida*. Add loc. Pt. Molle.
 (C.) *mittchelli*. For Darling Downs Pomegranate read Caper Tree.
- Before Family *Bixineae* insert
FAMILY CRUCIFERAE
- Brassica**
junceae (Hk. and T.). Indian Mustard
 India and China.
 Yarrabah (Michael).
- FAMILY VIOLACEAE** (DC.)
Ionidium (Benth.)
suffruticosum (Ging.) Spade Flower
 Mabuiag Is. (Macgregor).
- Rinorea**
australasica (White). Flowers Dec.
 Daintree R. (Kajewski)
- Cochlospermum gregorii* Add loc. Croydon (Wilson).
- For (Family) *Pittosporaceae* (R.Br.) read **PITTOSPORACEAE**.
- Before (P.) *wingii* add
 (P.) *revolutum* (Aiton)
 Scrubby Creek (Kajewski)
- After (P.) *wingii* (F.v.M.) add Flowers
 Sep.
 Add loc. L. Berrine (Kajewski).
- Before *Bursaria* insert
Hymenosporum (F.v.M.)
flavum (F.v.M.) Flowers Oct.
 Glen Allyn (Kajewski); Rockingham B. (F.v.M.)
 (B.) *tenuifolia*. Add loc. Range Rd. (Kajewski).





The North Queensland Naturalist

The Official Journal and Magazine of the North Queensland Naturalists' Club

Vol. 2. No 7.

CAIRNS, APRIL 1934

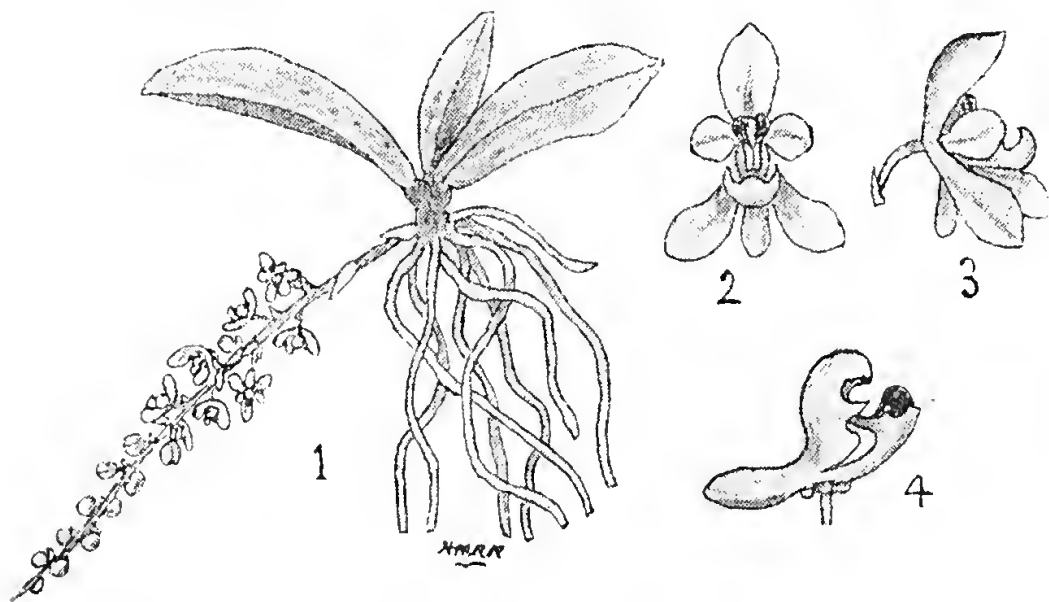
A New Orchid from Proserpine, North Queensland

Cleisostoma orbiculare, n.sp.

By the Rev. H. M. R. Rupp, Woy Woy, N.S.W.

In November 1933 I received from Mr. K. Macpherson, of Strathdickie North, Proserpine, several plants of a small *Cleisostoma* with budding racemes, which all subsequently expanded their flowers. At first I was disposed to identify these specimens with F. M. Bailey's *C. nugentii*, but further critical examination of a number of flowers revealed features apparently irreconcilable with Bailey's description (Q.Fl. p. 1555). Mueller's *C. armitii* also seemed a possible solution of the identity, but existing descriptions are meagre, and the lateral lobes of the labellum are stated to be ovate, whereas in the Proserpine flower they are acutely angular. At my request Mr. Macpherson sent specimens to Dr. R. S. Rogers of Adelaide, and I forwarded one myself to Mr. W. H. Nicholls of Melbourne. Mr. Nicholls agreed that the flowers differed from the description of *C. armitii*. Dr. Rogers wrote: "I have examined the specimens very carefully, and find floral details which are difficult to reconcile with available descriptions of either *C. nugentii*, Bail. or *C. armitii*, F.v.M." He added that while this may possibly be due to imperfect description or to indifferent material available to the authors of these species, in his opinion the Proserpine plant should be described, even at the risk of being ultimately regarded as conspecific with *C. nugentii* or *C. armitii*. My own view after still further examination is that Mr. Macpherson's plant presents features which cannot be reconciled with those described by Bailey or Mueller.

Continued Overleaf



CLEISOSTOMA ORBICULARE n.sp.

1—Plant, nat. size. 2—Flower, front. 3—Flower, side. 4—Labellum and column, side. (2—4 much enlarged)

Planta parvissima cum scapo brevi, folia carinata 3-5. Racemi sub foliis patentes, 3-6 cm. longi. Flores numerosi flavovirides labellis albis. Sepalum dorsale 2 x 1 mm., sepala lateralia angustiora, petala orbicularia, 1 mm. Labellum calcaratum, trilobatum lobis lateralibus angulatis. Columna 1½ mm., anther magnus fuscus.

A very small plant, epiphytal on trees, with a short stem. Leaves 3-5, with prominent dorsal midrib or keel. Racemes straight, spreading or slightly deflexed, under the leaves, 3-6 cm. long. Flowers numerous, almost sessile with narrow bracts, yellowish-green with white labellum. Dorsal sepal 2 x 1 mm., narrowed basally: lateral sepals similar but not as broad, adnate to the foot of the column. Petals orbicular, 1 mm. Labellum with a basal spur, above which it is three-lobed; midlobe rounded with inturned margins, lateral lobes rather sharply angular. Column 1½ mm., anther large, dark brown.

The plant appears to me to differ from *C. armitii*, F.v.M. in the following respects: Bracts and sepals longer; petals never "a little acuminate" (in a few cases minutely mucronate); lateral lobes of labellum never "ovate" but angular; column not "very short"—i.e. relatively to the other parts. The anther of *C. armitii* is not mentioned: in the new species it is a very striking feature. The plant differs from *C. nugentii*, Bail. as follows: Racemes not erect, and devoid of a larger "spreading or recurved" bract below the flowers; lateral lobes of labellum not colored on the margins; column lacking "broad green ciliate wings; anther not purple.

In default of any other striking feature well adapted for nomenclature, I have given the specific name *orbiculare* from the shape of the petals. The discoverer is to be congratulated upon this addition to the list of our orchid flora, and it would have been a pleasure to attach his name to it, but this course is prohibited by the fact that Bentham and Mueller gave the name *C. macphersoni* to another Queensland species.

Mount Dryander, near Proserpine, N.Q., Nov. 1933, K. Macpherson.

Census of North Queensland Plants (Continued)

FAMILY AMARANTACEAE (Juss.)

Deeringia (R.Br.)

celosioides (R.Br.)

Yama Is. (Macgregor); Endeavour R.

(Cunn.); Barnard Is. (Macgillivray);

Rockingham B. (Dallachy); Pt. Denison (Fitzalan).

altissima (F.v.M.)

Endeavour R. (Banks and Sol.); Rock-

ingham B. (Dallachy); Pt. Denison

(Fitzalan); Edgecombe B. (Dallachy)

arborescens (R.Br.)

L. Barrine (Kajewski)

Amarantus (L.)

spinus (L.). Prickly Amaranth. Introduced.

Endeavor R. (Tenison-Woods)

leptostachyus (Benth.)

Is. off Cape Flattery

pallidoflorus (F.v.M.) Pallid Amaranth.

Flinders R. (Plant)

mitchellii (Benth.)

Flinders R. (Sutherland)

viridis (L.) Flowers Feb., March and Dec.

Mt. Mulligan; Dimbulah; Cairns.

Ptilotus (R.Br.)

conicus (R.Br.)

Is. of G. of Carpentaria R.Br.)

corymbosus (R.Br.)

Is. of G. of Carpentaria (R.Br.)

spicatus (F.v.M.), var. *leianthus* (Benth)

Flinders R. (Bowman); G. of Carpentaria (Leichhardt).

Trichinium (R.Br.)

parviflorum (Lindl.)

Flinders R. (Bowman)

dissitiflorum (F.v.M.)

G. of Carpentaria (F.v.M.)

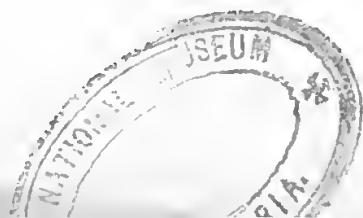
distans (R.Br.)

Thursday Is. (F.M.Bail.); Rocking-

ham B. (Dallachy); Cape R. (Bowman).

macrocephalum (R.Br.). Featherheads.

Charters Towers (Plant)





The North Queensland Naturalist

The Official Journal and Magazine of the North Queensland Naturalists' Club

Vol. 2. No. 8.

CAIRNS, MAY 1934

Aquatic Insects in North Queensland

By DAVID O. ATHERTON, B.Sc.Agr., Q.D.A.

The abundance of insects closely associated with other forms of life in pools and streams of fresh water is one of the most striking impressions made on the student of nature. This insect life is particularly interesting and abundant in North Queensland where the diversity of water-frequenting forms and totally aquatic species is displayed in all its shades of glory. Diverse shapes and sizes are adopted by the varied species as the best means of adapting themselves to the watery environment, and even the same species present quite different appearances at different stages of its existence. One or two examples will illustrate this diversity. Few people would imagine that a certain queer segmented larva, clinging by means of six ventral suckers to a rock in swiftly running water, eventually emerges as a delicate gauzy winged midge; or that an ungainly nymph, stalking its prey under the surface of the water, matures into a brilliant flier such as the dragon fly. The various orders which supply species to the aquatic fauna of the North include the following:—Trichoptera, Diptera, Coleoptera, Hemiptera, Perlaria and Odonata.

The Trichoptera are popularly known as caddis flies or caddis worms and are more familiar to the student as larvae than as adults. The species in this order are, almost without exception, aquatic during their immature stages. The larvae or caddis worms use an auto-genous cement to bind pieces of leaves, sticks, or small grains of sand into permanent shelters which are used throughout their aquatic existence. The shelter may be either fixed or portable but is always so constructed to enable the larvae to extend the fore part of the body through an opening. This method of construction allows the freedom of movement necessary in the operations of obtaining food, adding to the shelter, and, in the case of those worms with portable shelters, progress from place to place. The adults are generally small dull or dark colored moth-like creatures found near streams of fresh water; very often they are to be seen resting on the rocks which abound in the courses of our northern mountain torrents.

The Diptera or true flies include a number of local aquatic species of which there are, unfortunately for ourselves, enormous numbers of individuals. Of all aquatic flies the Culicidae or mosquitoes are of course the best known group—their attentions are forced on the unobservant as well as on the observant and consequently they merit little attention in an article such as this. However, although the fact that most mosquitoes breed in fresh water is well known, it is not generally realised that all species must have water for the development of their immature stages. A number of species are able to breed in sea water provided it occurs in protected situations. The occurrence of enormous numbers of mosquitoes on parts of the Queensland coast can probably be explained by some such phenomenon as the above, especially as their appearance is generally seasonal.

To be continued

Census of North Queensland Plants (Continued)

- Trichinium (continued)
exaltatum (Benth.) Lamb-tails.
 Northcote (Burton); Cape R. (Bowman).
semilanatum (Lindl.)
 Head of Gilbert R. (F.v.M.)
fusiforme (R.Br.)
 Is. of G. of Carpentaria (R.Br.); Normananton (Gulliver).
gracile (R.Br.)
 Is. of G. of Carpentaria (R.Br.)
calostachyum (F.v.M.)
 Is. of G. of Carpentaria (R.Br.)
Cyathula (Lour.)
prostrata (Blume)
 Mulgrave R.
Achyranthes (L.)
aspera (L.) Washerman's Plant.
 Is. of G. of Carpentaria (R.Br.); Albany Is. (F.v.M.); C. York (Daemel); Rockingham B. (Dallachy).
var. canescens (Benth.)
 Is. of G. of Carpentaria (R.Br.)
Alternanthera (R.Br.)
denticulata (R.Br.). Joyweed.
 Gilbert R. (Daintree); Pt. Denison (Fitzalan).
angustifolia (R.Br.). Narrow-leaf Joyweed.
 Is. of G. of Carpentaria
Gomphrena (L.)
canescens (R.Br.)
 G. of Carpentaria (R.Br.)
flaccida (R.Br.)
 C. York (Daemel)
humilis (R.Br.)
 Pt. Denison (Fitzalan)
brownii (Moq.)
 Is. of G. of Carpentaria (R.Br.)
conica (Sprengel)
 Is. of G. of Carpentaria (R.Br.); Wednesday Is. (Haswell).
conferta (Benth.)
 C. Flinders (Cunn.)
diffusa (Sprengel)
 Is. of G. of Carpentaria (R.Br.)
decumbens. Introduced.
 Mareeba; Torrens Cr.; Townsville.
FAMILY CHENOPODIACEAE (Endl.)
Rhagodia (R.Br.)
spinescens (R.Br.). Thorny Saltbush
 Burdekin R.;
Chenopodium (L.)
auricomum (Lindl.) Bluebush.
 G. of Carpentaria (Landsborough).
Atriplex (L.). Saltbushes.
humilis (F.v.M.)
 Subsaline banks of Flinders R.
 (F.v.M.)
halimoides (Lindl.)
 Lawn Hill (Hann)
Enchylaena (R.Br.)
tomentosa (R.Br.)
 Cloncurry (Palmer); Burdekin R.
 (F.v.M.)

Addenda and Corrigenda

- Vol. 1
 No. 10, p. 5.—After (*Drosera*) *indica* add
 Narrow-leaf Sundew.
 Add loc. Badu Is. (Macgregor).
 Before (D.) *burmanni* add
 (D. *indica*), *forma robusta* (Bail.)
 Millstream Falls
 After (D.) *petiolaris* add Tufted Sundew.
 After (D.) *banksii* add (R.Br.) Slender
 Sundew.
 p. 6—Delete (*Garcinia*) *cherryi*, and substitute
 (G.) *glaberrima* (Moore)
 Boonjee (Kajewski); Nr. Mt. Bartle
 Frere (White)
kajewskii (White)
 Daintree R. (White)
 Delete Family *Ternstroemiaceae*.
 Delete *Saurauja andreana*.
 Before Family **POLYGALACEAE** insert
 (*Calophyllum*) *touriga* (White and Francis). Brown Touriga.
 Bellenden Ker Range, 2,000 to 3,000
 ft. (White); Boonjee (Francis); Gourka
 Pocket, Atherton Tableland (Merrotsy).
FAMILY CAMELLIACEAE.
Ternstroemia (L.)
cherryi (Bail.)
 Coen (Cherry); Gadgarra (Kajewski)
 Atherton District (Mocatta).
 After (*Polygala*) *leptalea* (De Cand.)
 add Slender Milkwort.
 (P.) *arvensis*. Add loc. Mapoon (Macgregor).
 After (P.) *stenocladia* (Benth.) add Nar-
 row-leaf Milkwort.
 After (*Bredemeyera*) *secunda* (Labill)
 add Stiff Milkwort.
 Before Family *Meliaceae* insert
Xanthophyllum (Roxb.)
octandrum (F.v.M.)
 Daintree R. (Kajewski); Boonjee (Ka-
 jewski).
 For *Dysoxylum* (Belit) read *Dysoxylum*.
 Before (D.) *klanderii* insert
 (D.) *muelleri* (Benth.). Kedgy-kedgy.
 Daintree R. (Kajewski).
 (D.) *klanderii*. Add loc. Gadgarra (Ka-
 jewski).
 (D.) *pettigrewianum*. Add locality
 Gadgarra (Kajewski).
 After (D.) *nernstii* (F.v.M.), insert Flow-
 ers Dec.
 Add loc. Daintree R. (Kajewski).
 Before (D.) *oppositifolium* insert
densevestitum (White and Francis)
 Harvey's Cr. (Bail.); Johnstone R.
 (Michael).
 Before *Synonym* insert
 (A.) *ferruginea* (White and Francis)
 Atherton Tableland (White); Gad-
 garra (Kajewski)



The North Queensland Naturalist

The Official Journal and Magazine of the North Queensland Naturalists' Club

Vol. 2. No. 9.

CAIRNS, JUNE 1934

Aquatic Insects in North Queensland

By DAVID O. ATHERTON, B.Sc.Agr., Q.D.A.

(Continued from p. 15)

Another group habitually breed in the water held in holes and hollows of trees, and this habit explains their presence in forest country often miles from any visible water.

Sand flies, midges or Chironomidae are closely allied to the former group and may breed in either fresh or salt water. The tiny insects known as "sand flies" on the coastal areas of Queensland belong to the genus *Ceratopogon*. The adults make themselves familiar to all, but the extremely small worm-like larvae generally escape notice. The insects known as sand flies in New Zealand belong to the family Simuliidae and are known as buffalo gnats in America. Some species of this group also occur in the north and the larvae are legless grubs which cling to the rocks of mountain streams by means of a sucker situate in the posterior region. These larvae are also possessed of another sucker on the thorax and progress by means of the two, advancing in a series of loops somewhat similar to the locomotion of a "looper" caterpillar.

Larvae of the net-veined midges or Blepharoceridae also occur on the rocks in the rapids of northern streams. They are extraordinary-looking creatures about a quarter of an inch in length, and the body is deeply divided into six segments, each segment being provided with a ventral sucker. The under side of the body is light coloured but the dorsal surface is dark grey or nearly black and blends very well with the environment. These interesting creatures can be found clinging to the rocks in the most swiftly running water; I have taken them myself in the south branch of the Mossman river and surmise that there are a number of undescribed species in this and other Northern streams.

Several families of the Coleoptera or beetles are aquatic and a number of other families include aquatic species. The Dytiscidae or true water beetles include insects up to an inch in length, though there are numerous small species. They are generally dull coloured and the legs are modified for swimming, though the adults are able to live on land. Both larvae and adults are exclusively carnivorous and feed on any aquatic animals of convenient size. One large species over an inch long is *Homeodytes Acutellaris*, Germ. It is almost black in color except for a band of light brown on each side extending back from the eyes along the edge of the pronotum and around the costal margin of each elytron. Another, about three quarters of an inch long, is *Sandracottus Bakewellii*, Clark. This species is generally black but with an irregular yellowish band across the pronotum and three jagged irregular yellowish-brown bands across the folded elytra.

The Gyrinidae are popularly known as whirligig beetles and occur very commonly in creeks and ponds and sometimes even in the pools which lie for short periods after rain.

To be continued

Census of North Queensland Plants (Continued)

- Enchylaena tomentosa*
? var. *leptophylla* (Benth.)
Nr. Gainsford (Bowman)
- Sclerolaena* (R.Br.)
diacantha (Benth.)
Cape R. (Bowman)
- Threlkeldia* (R. Br.)
brevicuspis (F.v.M.)
Cape R. (Bowman)
- Tecticornia* (Hook.)
cinerea (Benth. and Hook.)
Mornington Is. (Macgregor); C. York
(M'Gillivray); Trinity B (Hill).
- Suaeda* (Forsk.)
maritima (Dumort.), Seablite. Flowers
April, May and Nov.
Cairns; Cleveland B. (Bowman)
- Salsola* (L.)
kali (L.) Prickly Saltwort.
Cape R. (Bowman); Palm Is. (Herbert)
var. *brachypteris*
Rockingham B. (Dallachy)
- Family AIZOACEAE (FICOIDAE, Juss.)
- Sesuvium* (L.)
portulacastrum (L.)
Howitt's Gp. (F.v.M.)
- Trianthema* (L.)
crystallina (Vahl.)
Cape R. (Bowman); Burdekin R.
(F.v.M.)
- pilosa* (F.v.M.)
Is. of G. of Carpentaria (R.Br.)
- rhynchocalyptra* (F.v.M.)
Is. of G. of Carpentaria (R.Br.)
- compacta* (White)
Mornington Is. (J. F. Bail.); Between
Gilbert and Norman Is. (Gulliver);
Escott Stn., via Burketown (McIntyre)
- Family POLYGONACEAE (Juss.)
- Polygonum* (L.)
plebeium (R.Br.) Small Knotweed.
Gilbert R. (F.v.M.); Herbert R.
(Eaton); Proserpine (Michael).
- barbatum* (L.)
Bellenden Ker Range (Karsten);
Proserpine (Michael).
- attenuatum* (R.Br.)
Is. of G. of Carpentaria (R.Br.);
Gilbert R. (White); Proserpine
(Michael)
- orientale* (L.)
Johnstone R. (Ladbrook); Rocking-
ham B. (Dallachy); Mt. Julian, nr.
Proserpine (Michael).
- minus* (Huds.) Slender Knotweed.
Rockingham B. (Dallachy); Burdekin
R. (F.v.M.)
- subspecies *declpiens* (R.Br.)
Proserpine (Michael)
- subsessile (R.Br.). Hairy Knotweed.
Cairns (White); Yarrabah (Michael);
Kulara (Bick).
- lappathifolium* (L.)
Burdekin R. (F.v.M.)

Addenda and Corrigenda

Vol. 1

No. 9, p. 6—Delete *Galbulimima baccata*.

Before Family Anoniaceae insert

Family HIMANTANDRACEAE

Himantandra

baccata (Diels)

Boar Pocket (J. F. Bail.); Evelyn
(J. F. Bail.)

p. 7—*Cryptocarya obovata*. For White
Walnut read Pepper Berry Tree.
Flowers about March.

Before (C.) *glaucescens* insert (C. obo-
vata) var. *hypspodia*.
Atherton (Francis).

Beilschmiedia obtusifolia. Add loc. Dain-
tree R. (Francis)

After (Endiandra) *discolor* (Benth.) in-
sert *Domatia* Tree.

Litsea zeylanica. Add loc. Cairns (Fran-
cis)

L. dealbata. Add loc. Cairns (Francis)

After *L. ferruginea* (Benth. and Hook.)
Pigeon-berry Tree, add Flowers
Feb and Mar.

After *L. reticulata* (B. and H.) Bally
Gum, add Flowers April and May.

Before *Hernandia* insert Family HER-
NANDIACEAE.

For *Capparideae* (Endl.) read
CAPPARIDACEAE.

No. 10, p. 5—Before Family

PITTOSPORACEAE insert

Family FLACOURTACEAE

Scolopia

brownii (F.v.M.)

C. York (Benth.)

Before *Pittosporum setigerum* add
(P.) *rhombifolium* (Cunn.)

Proserpine (Francis)

Hymenosporum flavum. For Flowers
Oct. read Flowers Oct. and Nov.

Add loc. Atherton (Francis)

p 6—After (Melia) *azedarach* (L.) var.
australasica, Tulip Cedar, add Flow-
ers Sep. and Oct.

Before Synonym add

Amoora (Roxb.)

nitidula (Benth.) Incense Wood.

Atherton (Francis); Herberton.

After (S) *muelleri* (DC.) add Flowers
June.

Add locs Rocky Cr., Atherton Dist. (J.
F. Bail.); Atherton (J. F. Bail.); L.
Barrine (J. F. Bail.); Gadgarra
(Kajewski).

p 7—*Owenia reticulata*. Insert loc. Van
Rook, C. York Pen. (McCawley).

After (Cedrela) *toona* (Roxb.) var. *aus-
tralasica* (DC.) Red Cedar add
Flowers Sep. and Oct.





The North Queensland Naturalist

The Official Journal and Magazine of the North Queensland Naturalists' Club

Vol. 2. No. 10.

CAIRNS, JULY 1934

Some Orchids of the Proserpine District, North Queensland

By the Rev. H. M. R. Rupp

Many of the orchids described by the late F. M. Bailey in his *Queensland Flora* are almost unknown to the present generation of Australian botanists. The types of those which were named by Baron von Mueller are presumably in the Melbourne National Herbarium, but few of Bailey's own type forms appear to have been preserved. Fitzgerald kept none of his types, and it is not easy to ascertain what others are still in existence, or where. Within the past year or two Mr. Ken Macpherson, of Strathdickie North, Proserpine, has been re-discovering some of these little-known plants, and it is much to be desired that specimens should be available in the near future in the principal Australian herbarium collections. Mr. Macpherson's keen interest in the orchid flora of his district will doubtless result in further discoveries, and in fuller information concerning those forms he has already brought to light. In the meantime some brief notes on orchids sent by him to the present writer, which appear to be of special interest, may be appreciated as an interim record.

1. *Liparis Nugentae* Bail.—Leaves and flowers larger than those of the better-known *L. reflexa* Lindl., and the former more membranous in texture. Pseudobulbs flattened vertically. Labellum reflexed so sharply that the suddenly-bent margins form a prominent "tooth" on either side. This species is figured in one of Fitzgerald's unpublished plates in the Mitchell Library at Sydney; but so little known is the species, that identification of this unnamed plate was found difficult, though it is an admirable representation of the plant.

2. *Liparis habenarina* F.v.M.—Mr. Macpherson reports this as a strictly terrestrial species, found growing with *Geodorum pictum* Lindl. It was almost past flowering, and the raceme sent to me was difficult to determine: I forwarded a few flowers to Dr. R. S. Rogers, who confirmed my opinion that it was *L. habenarina*. Neither Bentham nor Bailey allude to the connate lateral sepals of this species. Dr. Rogers states that in a specimen sent by the late E. J. Banfield from Dunk Island they were connate for the greater part of their length. In the Proserpine flower they are completely connate and sharply reflexed beneath the labellum, giving the impression of two labella one above the other.

3. *Dendrobium Bowmanii* Benth.—As an article dealing with this species will shortly appear in the *Queensland Naturalist* (Brisbane), it must suffice here to say that it appears to me to have been "created" under a misapprehension, and should probably be regarded as a form of *D. Mortii* F.v.M.

4.—*Osyricera purpurascens* Deane. (*Bulbophyllum purpurascens* Bailey.)—This is an extremely interesting little orchid, very diminutive but very beautiful under a magnifier. It has had a very chequered career at the hands of botanists; and investigation by Dr. R. S. Rogers now makes it clear that neither the generic name

Continued on next page

attached by Deane, nor the specific name bestowed originally by Bailey, can stand. I hope very shortly to have the privilege of re-naming it in accord with a suggestion made by Dr. Rogers.

5.—*Cleisostoma orbiculare* Rupp.—Described and figured in this Journal, April 1934.

6. *C. brevilabre* F.v.M.—General appearance of plant very similar to that of *Ornithochilus Hillii* Benth., but brighter green. Racemes produced very freely. Flowers pale creamy-green with or without brown spots, very fragrant. Labellum remarkably short with a very long basal spur. This is a very attractive little orchid, and seems more amenable to cultivation than the southern *C. tridentatum*.

7. *Cymbidium canaliculatum* R.Br. var. *marginatum* Rupp, forma *purpurascens*.—In a paper read before the Linnean Society of N.S.W. in April, 1934, I have attempted to define the various forms of this "Protean" species, which is remarkable for its immense range of habitat, its adaptability to very dry and very humid conditions, and its striking variations in colour-scheme and colour. The type form has greenish flowers more or less heavily blotched with brown. The Proserpine flower is bright magenta, not blotched, but with narrow borders of pale green.

8. *Nervilia* Comm., 2 species.—Bentham and Bailey describe several Australian species of *Pogonia*, belonging to the section *Nervilia*, but this section has since been recognised as comprising a distinct genus. These orchids are terrestrial: the plant has a single reniform or orbicular veined leaf, flat on the ground, and developing at a different time from the flowering stem. Mr. Macpherson has found leaves of two obviously distinct species, and hopes to obtain flowers later on.

Addenda and Corrigenda

(Figures after plants indicate flowering months)

Vol. 1

No. 10, p. 7—Before *Flindersia* insert

Family RUTACEAE, Juss. and delete before *Zieria*.

(F.) *schottiana*. For Bunji Bunji read Cugerie. 6 to 12.

Add loc. Atherton Plat.

Delete (F.) *chatawaiana*.

Before (F.) *iflaiana* insert

(F.) *pubescens*, F. M. Bail. 11.

Trinity B. (Hill); Kairi (White);

Rockingham B. (Dallachy);

Hinchinbrook Is.

Brayleyana, F.v.M. Maple Silkwood. 11 to 1.

Atherton to Ravenshoe Tableland;

Herberton to Cardwell (J. F. Bail.);

Tully R.

(F.) *iflaiana*. For Cairns Hickory read Hickory Ash. 10 to 6.

Add locs. Daintree R. (Swain); Mt. Molloy Dist. (Swain); Atherton Dist.

Delete (F.) *mazlini*.

After (F.) *pimenteliana* (F.v.M.) insert Rose Silkwood. 10 to 5.

Add locs. L. Barrine (Kajewski); Atherton (Mocatta); Evelyn (J. F. Bail.)

Before (F.) *bourjotiana* insert

(F.) *laevicarpa*. White and Francis. Rose Ash.

Tinaroo Range (Swain); Gadgarra (Fuller); S.E. of L. Barrine (Swain); Tarzali (Swain); Dirran (Swain).

acuminata, White. White Silkwood. 1 to 12.

Atherton Tablelands (Mocatta)

Evelyn Tablelands (Swain); Up. John-

stone R. (White); Innisfail (Michael)

(F.) *bourjotiana*. Add locs. Mossman R. (Tryon); Gadgarra (Kajewski); Herberton (Mocatta); Johnstone R. (Bancroft).

Place *Zieria smithii* (Andr.) on separate line and add 7.

Add loc. Gadgarra (Kajewski).

After (Boronia) *artemisiaefolia* (F.v.M.) add Hoary Boronia.

After (B.) *bowmani* insert F.v.M.

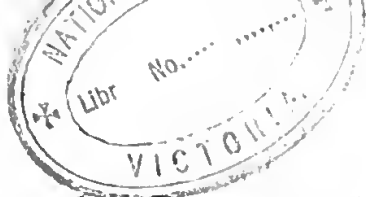
Before *Eriostemon* add

(B.) *polygalifolia*, Sm., var. ? *pubescens*, Benth.

Stannary Hills (Bancroft).

Melicope fareana. Add loc. Kairi (Bick.)





The North Queensland Naturalist

The Official Journal and Magazine of the North Queensland Naturalists' Club

Vol. 2. No. 11.

CAIRNS, AUGUST 1934

Aquatic Insects in North Queensland

By DAVID O. ATHERTON, B.Sc.Agr., Q.D.A.

(Continued from p. 17)

The commoner species are from one-half to three-quarters of an inch in length and greenish-brown in colour, usually occurring together in numbers and thus showing gregarious habits. As the common name implies, they swim rapidly and erratically about the surface, often whirling round on a circular course at a relatively tremendous speed. Although much of the time is spent on the surface they are very capable divers and frequent the bottoms of pools and streams in search of prey. Each eye is divided into an upper and a lower section, the former is above and the latter is below the surface of the water when the beetle swims on top. Two common species are *Macrogyrus australis* Brulle, about half an inch long, and *M. striolatus* Guer., about half as large again as the former. Both are dark greenish-brown in colour.

In the order Hemiptera or bugs there are also some families of generally aquatic habit and the species range in length from one-eighth of an inch to three inches. The Gerridae or water striders (often erroneously called water spiders) are very frequently encountered on ponds and sluggish streams. They are fairly stout-bodied insects with long legs and, as the name implies, progress along the surface of the water relying on its surface tension to support them. The immature stages or nymphs resemble the adults very closely in habits and appearance and neither stage is in the habit of descending below the surface. All stages feed on other insects captured on top of the water, though sometimes the food consists of insects which are already dead.

The family Belostomatidae comprises the giant water bugs and our commonest representative of this group is *Lethocerus indicus* Stal., whose dark coloured brownish-green body is upwards of three inches long and over an inch wide. The forelegs are terminated by sharp spines and by means of these the bugs are able to hold their

To be continued

***Bulbophyllum Macphersonii*, nomen novum, Rupp, 1934**

In the July 1934 issue of the Victorian Naturalist, the above name was given to what was listed in our last issue as *Osyricera purpurascens*, Deane. A figure of this orchid as well as the peculiar circumstances necessitating this change in name are there given in full.

Book Review

TERMITES AND TERMITE CONTROL. Charles A. Kofoid, Ph.D., Sc.D., Prof. of Zoology, Univ. of Calif., Editor in Chief. Price 5 dol. 768 pages and 182 figures. Published by Univ. of California Press, Berkeley, Cal.

This is the work of a special Termite Investigation Committee and represents a magnificent piece of co-operative work carried out by a large team of workers dealing mostly with North American material, and is of immense practical value not only to other workers investigating termites in other fields, but especially in a practical sense in the way of prevention and treatment of infestation. It can accordingly be recommended as a classic, not only to scientists engaging in such problems, but also to bodies having to do with timbers, such as architects, or indeed property owners of all kinds in infested districts.

Census of North Queensland Plants (Continued)

- Polygonum dichotomum*, Bl.
Johnstone R. (Ladbrook); Proserpine (Michael).
- strigosum*, R.Br. Spotted Knotweed.
Malanda (White); Rockingham B. (Dallachy).
- Rumex*, L. Dock.
halophilus, F.v.M.
G. of Carpentaria (F.v.M.); Flinders R. (F.v.M.)
- Muehlenbeckia*, Meissn.
rhyticarya, F.v.M.
C. York (Daemel); Rockingham B. (Dallachy).
- Family **PHYTOLACCACEAE**, R.Br.
Monoecus, F.v.M.
echinophorus, F.v.M.
Pt. Denison (Fitzalan); Edgecombe B. (Dallachy).
- Family **NYCTAGINEAE**, Juss.
Boerhaavia, L.
diffusa, L. Tah vine.
Batavia R. (F.M.B.); Cloncurry (F.M.B.); Palm Is. (Herbert).
- Pisonia*, L.
aculeata, L.
C. York (Daemel); Rockingham B. (Dallachy); Edgecombe B. (Dallachy)
Burdekin R. (Fitzalan).
- inermis*, Forst.
Is. of G. of Carpentaria (R.Br.);
Rockingham B. (Dallachy).
- P. Brunouiana*, Endl.
Mulgrave R. (Francis); Rockingham B. (Dallachy).
- Family **THYMELAEACEAE**
Pimelea, B. and Sol. Rice Flower.
cornucopiae, Vahl.
Badu Is. (Macgregor); C. York (Daemel); Endeavour R. (B. and Sol.)
Rockingham B. (Thozet); Pt. Denison (Fitzalan); Burdekin R. (Bowman).
sanguinea, F.v.M.
Norman R. (Gulliver); Gilbert R. (Gulliver); Cape R. (Bowman).
collina, R.Br. Mountain Rice-flower.
Range between Flinders and Burdekin Rs. (Thozet)
- involucrata*, B. and Sol. Slender Rice-flower.
Rockingham B. (Dallachy).
- haematostachya*, F.v.M.
Rockingham B. (Dallachy); Pt. Denison (Fitzalan); Burdekin R. (F.v.M.); Edgecombe B. (Dallachy).
- latifolia*, R.Br.
Mt. Elliott (Dallachy); Pt. Denison (Fitzalan).
- sericostachya*, F.v.M.
Newcastle Range (Armit); Sellheim R. (Bowman).

Addenda and Corrigenda

(Figures after plants indicate flowering months)

- Vol. 1.
No 9, p. 5—Before
(*Hibbertia*) *melhanoides* add
(*H.*) *glaberrima*, F.v.M., Gnaandjeen, 3
Mt. Mulligan (Flecker)
- Nymphaea lotus*, var. *australis* For
(Baile) read F. M. Bail.
- (*N.*) *tetragona* Insert loc. Still shallow
waters off Barron R
- For (*Piper*) *banksii* (Mig.) read
(*P.*) *Banksii*, Miq.
- Delete *Mollinedia*, Kibara and *Wilkiea*
and substitute *Wilkiea*, F.v.M.
- Huegeliana* (Tul.) A DC.
Bellenden Ker Range
angustifolia, F. M. Bail.
Bellenden Ker, 3,000 to 4,000ft.
Wardelli (F.v.M.) Perk.
Rockingham B. (Dallachy)
macrocarpa (F. M. Bail.) Perk. 11.
Bellenden Ker Range to Summit of
S. Peak; Herberton Range (Kajewski)
macrophylla (Benth.) A.DC.
Endeavour R.; Gadgarra (Kajewski).
After (*Hedycarya*) *laxocarya* (Benth.)
add Francis.
- After *Levieria*, add Beccari.
(*L.*) *acuminata* (Dallachy) Add loc.
Rockingham B. (Dallachy).
- After *Tetrasynandra*, add Perk.
(*T.*) *laxiflora*. For Flowers May, read
Wonda. 2 to 5.
Add locs. Freshwater Cr. (Cowley);
Tully R. (Roth.); Rockingham B.
(Dallachy).
- (*T.*) *pubescens*. Add loc. Rockingham
B. (Dallachy).
- No. 10, p. 5—After (*Drosera*) *indica*, (L.)
Narrow-leaf Sundew, add 3.
Add loc. Mt. Mulligan (Flecker).
After (*Byblis*) *liniflora* (Salish.) add 3.
Add loc. Mt. Mulligan (Flecker).
- P. 6—After (*Ionidium*) *suffruticosum*
(Gilg.) Spade Flower, add 3.
Add loc. Mt. Mulligan (Flecker).
- P. 7—Delete (*Melicope*) *choorechillum*.
Before (*M.*) *broadbentiana* insert
(*M.*) *stipitata*, White and Francis.
Glenallyn, Malanda (Hayes); Ghurka
Pocket, Boonjie (Kajewski).
- After (*M.*) *broadbentiana* (F.M.B.) add 5
Add locs. Nr. Atherton (White);
Boonjie (Kajewski).
- Before (*Evodja*) *xanthoxyloides* insert
(*E.*) *micrococca*, F.v.M. 11 to 2.
Atherton District (Swain); L. Barrine
(Kajewski).
- (*E.*) *bonwickii*. Add loc. Gadgarra
(Kajewski).





The North Queensland Naturalist

The Official Journal and Magazine of the North Queensland Naturalists' Club.

Vol. 2. No. 12.

CAIRNS, SEPTEMBER 1934

Aquatic Insects in North Queensland

By DAVID O. ATHERTON, B.Sc.Agr., Q.D.A.

(Continued from p. 21)

Small fishes and tadpoles are included in the diet of this entomological monster which is occasionally attracted to lights.

Other representatives of the order which are common in the North are the Notonectidae or back-swimmers and the Corixidae or water-boatmen. As the common name of the former group implies, they are adapted to swimming on their backs though capable of walking normally when on land. The water-boatmen are somewhat similar to the others but swim in the natural posture. At times large numbers of both groups are attracted to lights and can be seen swimming about in a basin of water which has been left under a light for a few hours in the early part of the evening.

The Perlaria or stone flies are not very common in Australia and have not been recorded from areas where there are no mountain streams. In some respects the life history of stone flies is similar to that of dragon flies which will be described in the following paragraph. The larvae are wholly aquatic whilst the adults are free-living insects with two pairs of wings. There, however, the resemblance ceases. The eggs are laid free in the water and the larvae or nymphs are usually sluggish creatures living about the rocks of rapids where they are able to feed on the particles of animal and vegetable matter borne along in the water. Before transformation occurs the nymph climbs out of the water an inch or two on some convenient rock and the adult quickly emerges. The adults are comparatively soft-bodied insects and very sluggish fliers, often resting on the foliage near the stream. They are not adapted to combat dessication and therefore seldom wander far from the water where the early part of their lives has been spent. The Australian representatives of the group are closely allied to those of New Zealand and Patagonia, and therefore constitute further evidence in support of the supposed antarctic origin of the Australian fauna. Dr. R. J. Tillyard, F.R.S., states that the fauna is essentially antarctic and that "it is rarely met with on the mainland of Australia and then only on the mountains." I have taken as many as seven species on Roberts' Plateau of the Queensland National Park, but did not expect to find stone flies in North Queensland. However, during the year 1930 I took numerous nymphal exuviae clinging to the rocks in the Mossman river gorge. These were left near the water when the adults emerged to commence their aerial existence and were in a situation not more than two hundred feet above sea level. The interest attached to this observation is obvious when one remembers the distribution usually assigned to the group in Australia. Unfortunately I was unable to obtain any of the adults as I was there at the wrong time of the year for the flight, but with the number of enthusiastic field naturalists at present interesting themselves in the fauna of the North I hope that it will not be long before adult insects are taken during the winter in some of the gorges of our local mountain torrents.

To be continued

Census of North Queensland Plants (Continued)

(Figures after plants indicate flowering months)

- Wickstroemia, Endl.
 indica, May
 Rockingham B. (Dallachy); Ft.
 Denison (Fitzalan); Edgecombe B.
 (Dallachy).
 Phaleria, Jack
 blumei, Benth.
 C. York (McGillivray)
 var. latifolia, Benth.
 Yama I. (Macgregor)
 pedunculata, White
 Yarrabah (Michael)
 Neumannii, F.v.M.
 Barron R. (Cowley); Yungaburra
 (White); Herbert R. (Dallachy);
 Rockingham B. (Dallachy).
 clerodendron, F.v.M.
 Johnston R. (Michael); Rockingham
 B. (Dallachy).
 Oreodendron White
 biflorum, White. 12.
 Mt. Alexander (Kajewski)
 Family ELAEAGNACEAE
 Elaeagnus
 latifolius, L. Millai-millai.
 L. Barrine (Kajewski); Atherton
 (Roth); Gadgarra (Kajewski);
 Rockingham B. (Dallachy).
 Family CONNARACEAE
 Rourea, Aubl.
 brachyandra, F.v.M.
 Daintree R. (Fitzalan); Barron R.
 Scrubs (Cowley); Rockingham B.
 (Dallachy).
 Tricholobus, Blume
 connaroides, F.v.M. Na-bun-yu-ban.
 Babinda (Mrs. Rowan); Cardwell
 R.B.H.
 Family LEGUMINOSAE, Hall
 Brachysema, R.Br.
 oxyloboides, Benth.
 Newcastle Range (F.v.M.); Repulse
 B. (A. Cunn.)
 uniflorum, R.Br.
 Is. of G. of Carpentaria (R.Br.)
 Mirbelia, Sm.
 Ringrosei, F.M.B.
 Ranges between Irvinebank and
 Watsonville (Ringrose).
 Isotropis, Benth.
 parviflora, Benth.
 Is. of G. of Carpentaria (R.Br.)
 Gompholobium, Sm. Gelerger.
 nitidum, Solander.
 Endeavour R. (B. and Sol.)
 Bartonia, R.Br.
 subulata, Benth.
 Is. of G. of Carpentaria (R.Br.)
 Jacksonia, R. Br.
 dilatata, Benth.
 Is. of G. of Carpentaria (R.Br.)
 odontoclada, F.v.M.
 G. of Carpentaria (F.v.M.)
 vernicosa, F.v.M.
 G. of Carpentaria (F.v.M.)
 purpurascens, F.v.M. 4.
 Mt. Mulligan (Flecker)

Addenda and Corrigenda

- Vol. I
 No. 9, p. 6—After (Peperomia) leptostachya (Hook and Arn.) add 1.
 P. 8—Before Polanisia add
 (Cleome) aculeata, L. Introduced. 1, 7, 8
 Cairns (Flecker).
 No. 10, p. 5—Before Family Violaceae add
 Lepidium, L.
 rudérale, L. Narrow-leaved Pepperwort. Europe. 5, 7 and 8.
 Cairns (Flecker).
 P. 6—After (Calophyllum) inophyllum
 (L.) Alexandrian Laurel, add 12.
 Before Family CAMELIACEAE add
 Hypericum, L.
 gramineum, Forst. f. Small St. John's Wort. 5.
 Cairns (Flecker); Innisfail (Flecker).
 P. 7—After (Brombya) platynema
 (F.v.M.) add 12.
 (B.) platynema. Add loc. Daintree R.
 (Kajewski).
 Bottom of page, add
 (Z.) inerme, White and Francis.
 Moolgan Moolgan.
 Nr. Atherton (White).
 P. 8—After (Geijera) salicifolia (Schott)
 add 7 to 4
 Add loc. Atherton Dist. southward
 (Swain).
 After (Acronychia) baueri (Schott) add
 Brush Apple. 3 to 10.
 Add loc. Atherton (Francis)
 Before (A.) imperforata add
 (A.) laevis, Forst.
 Atherton (Francis)
 parvifolia, White. 9.
 E. Malanda (Kajewski)
 After (A.) imperforata (F.v.M.) Frazer
 Island Apple, add 1 to 4.
 (A.) melicopoides. Add locs.
 L. Barrine (Michael); Gadgarra
 (Kajewski); Johnstone R. (Michael).
 Before (A.) tetrandra add
 (A.) Scortechinii, F.M.B. Logan Apple.
 Atherton (Francis)
 chooreochillum, F.M.B. 12.
 Mt. Alexander (Kajewski); Mt. Bartle
 Frere (F.M.B.); Mt. Bellenden Ker
 (Sayer)
 verticillata, R.v.M.
 Boonjie (Kajewski).
 acidula, F.v.M.
 Cairns (Francis); Gadgarra
 (Kajewski).
 Before Halfordia add
 (A.) haplophella, F.v.M. 7 and 9.
 Gadgarra (Kajewski); Boonjie
 (Kajewski).



S1883

